

LISTING OF AND AMENDMENTS TO CLAIMS:

1. - 11. (canceled)

12. (currently amended) An apparatus for filing vias in a wafer, comprising:

a chamber in which to place the wafer, said chamber being capable of being evacuated;

a surface upon which to place said wafer;

a pressurized paste delivery portion for providing a paste to fill said vias; and

a pressurized paste filling portion for bringing said paste into contact with said vias under pressure so that said paste fills said vias, wherein said paste filling portion comprises:

a planar surface onto which said paste is deposited; and

a mechanism for applying pressure so that said paste on said surface is forced into contact with said wafer, wherein said mechanism for applying pressure comprises:

a plate which defines said surface; and

components for applying a pressure differential to said plate so as to force said plate toward said wafer.

13. (previously presented) The apparatus as recited in claim 12, wherein said paste filling portion provides said paste at a pressure within the range of 10 to 100 PSI.

14. (canceled).

15. (currently amended) The apparatus as recited in claim 12 [[14]], wherein said paste delivery portion comprises:

a surface onto which said paste is deposited; and
a passageway through which said paste is delivered to
said surface.

16. (canceled).

17. (currently amended) The apparatus as recited in claim 12 ~~[[16]]~~, further comprising a compliant material on said surface to which said paste is applied.

18. - 20. (canceled).

21. (original) The apparatus as recited in claim 12, wherein said surface upon which to place said wafer comprises a base plate having a recess for said wafer.

22. (currently amended) The apparatus as recited in claim 12 ~~[[21]]~~, wherein said surface upon which to place said wafer comprises a surface of an electrostatic chuck.

23. (original) The apparatus as recited in claim 12, wherein said paste delivery portion comprises a pressurized paste reservoir.

24. - 27. (canceled).

28. (currently amended) The apparatus as recited in claim 12, wherein said paste filling portion further comprises:

an elongate member having a surface with a slot through which paste is provided to said wafer; and

a compliant seal for sealing said surface to said wafer.

29. (original) The apparatus as recited in claim 28, further comprising a mechanism for translating said member and said wafer with respect to one another so as to fill vias in successive portions of said wafer.

30. (original) The apparatus as recited in claim 28, further comprising a mechanism for rotating said member and said wafer with respect to one another so as to fill vias in successive portions of said wafer.

31. (currently amended) The apparatus as recited in claim 30, wherein said mechanism for rotating said member and said wafer with respect to one another comprises ~~comprising~~ a rotating base having said surface upon which said wafer is placed.

32. (original) The apparatus as recited in claim 28, configured to accept a circular wafer, wherein said elongate member is disposed radially with respect to said wafer.

33. (previously presented) The apparatus as recited in claim 32, wherein said elongate member has a length less than that of a radius of said wafer, wherein said apparatus further comprises:

a mechanism for rotating said wafer; and

a mechanism for radially translating said member in a radial direction with respect to said wafer.

34. (original) The apparatus as recited in claim 33, wherein said mechanism for rotating said wafer includes a rotation speed control to control speed of rotation of said wafer.

35. (original) The apparatus as recited in claim 33, wherein said mechanism for radially translating said member includes a translation speed control to control speed of translation of said member with respect to said wafer.

36. (original) The apparatus as recited in claim 33, wherein said mechanism for radially translating said member includes a worm gear assembly, and a motor for rotating a drive shaft of said assembly.

37. (previously presented) The apparatus as recited in claim 12, wherein said wafer is disposed entirely within said chamber.

38. (previously presented) The apparatus as recited in claim 12, wherein said paste filling portion is disposed entirely within said chamber.

39. (previously presented) The apparatus as recited in claim 12, wherein said wafer and said paste filling portion are disposed entirely within said chamber.